

## US DoD selects Intermittent Fault Detection as The Great Maintenance Idea of 2010

- Awarded in recognition of the Intermittent Fault Detection & Isolation System's vast contribution to increasing F-16 avionics availability and reducing maintenance costs
- This highly prestigious annual competition attracted over 300 entrants this year
- The Winner was chosen after a vote of over 1500 senior DoD staff
- Civil and military customers in the EU and Australia can also benefit from this technology



A vote of over 1500 senior staff of the US DoD's maintenance and logistics communities led to selection of the **Intermittent Fault Detection & Isolation System (IFDIS™)** as the winner of the 2010 "Great Ideas" competition at its annual Maintenance Symposium & Exhibition last month. Competition for this year's award was intense, with the IFDIS™ team making it to the final 6 from over 300 entrants, with each of the 6 finalists then having to deliver a presentation to the Maintenance Symposium's influential audience. The IFDIS™ was the clear winner and the award was presented by Gary Motsek, US Dep Asst Secretary of Defense (Program Support).

The IFDIS™ project was nominated earlier this year by Hill Air Force Base's senior maintenance staff, owing to its outstanding contribution to F-16 fleet availability and operational capability. The heart of the IFDIS™ is the unique and flexible Ncompass™ range of Intermittent Fault Detection technology, and it was used to successfully test a vital Line Replaceable Unit (LRU), from the F-16 radar, which suffers from widespread 'No Fault Found' problems. The IFDIS™ tested 146 of the affected LRUs' chassis and identified that: 100 had intermittent faults, 33 had 'opens', 9 had 'shorts' and 4 were incorrectly wired. All of these items are now being recovered back to fully serviceable status: a saving to the DoD of over \$300k per LRU. Such has been the success of the project that this LRU's Mean Time Between Repair has improved from 315 to 731 flying hours, enabling further maintenance cost savings of \$1.1M per year.

### Contact us for more information

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Contact us now to see the full story, and to hear how we can help you to reduce costs and increase availability.

## BACKGROUND INFORMATION

### About the Competition

The Great Ideas competition is decided at the US DoD's annual Maintenance Symposium & Exhibition, which was held in Tampa, Florida, in November 2010. The competition provides a forum for the sharing of new ideas relative to maintenance technologies and processes. For 2010, 6 finalists were selected from over 300 initial entries. The final 6 were: the IFDIS™ team, comprising the Intermittent Fault Detection test equipment pioneers Universal Synaptics Corporation and prime contractor TQS, plus Pennsylvania State Applied Research Laboratory, StandardAero, the Michigan Research Institute, GFM and Boeing. The 6 finalists had to brief their promising new technologies, processes, or business practices to the Symposium audience, following which the IFDIS™ team was selected as the winner by the audience vote.

"All the participants in this year's Great Ideas Competition did an excellent job presenting their ideas and technological achievements" said Ken Anderson, Universal Synaptics Vice President of Sales & Business Development. "To be voted as the winner is an honour. The recognition of our Intermittent Fault Detection & Isolation System from our peers in the Department of Defence maintenance community as a real and viable solution to reduce No Fault Found is as significant as it is gratifying. This is a great win for Universal Synaptics and the entire IFDIS™ process team members from prime contractor, Total Quality Systems and Hill Air Force Base."

### About the Winners

Based in Ogden, Utah, USC is the industry leader in detecting and isolating elusive intermittent faults, following years of researching and solving complex diagnostic and testing problems. Their research into the primary root causes of intermittent / No Fault Found (NFF) problems and the massive digital testing void that exists today with conventional scanning test equipment, led to the development of the patented Intermittent Fault Detector (IFD™), hardware neural network wiring / circuit analyzer test solutions.

## HOW DO I UNLOCK THE MASSIVE POTENTIAL OF IFD?



Which button are you going to press?

Improved Safety

Improved Availability

Reduced Cost

Copernicus Technology Ltd is the sole source in Europe of the Ncompass™ IFD test technology that underpins the IFDIS™. We don't just sell IFD hardware - we provide an entire service from data analysis (to scope the problem), to bespoke test projects, to hardware sales: from Ncompass™ portables through to full IFDIS™ solutions. This test technology is incredibly flexible and can be applied to electronic integrity testing of any electrical/electronic component, from LRU chassis to wiring harnesses.

**Contact us now:**

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